Results: 1419 BCSP colonoscopies (1339 patients) were performed. 109 were repeats with median interval to repeat 378 days. Indication for prior colonoscopy included prior BCSP invitation (n=90), polyp surveillance (n=6) and symptoms (n=13). Colorectal cancer was identified in 111 patients, though none had had previous colonoscopy. Cancer yield in first time BCSP colonoscopy was greater than in repeated colonoscopy (8%vs 0% p=0.002).
Conclusion: Cancer yield is reduced in BCSP patients with a recent negative colonoscopy. Excluding such patients would reduce pressure on endoscopy units and the morbidity of the procedure but increases the risk of missing pathology. To inform national guidance larger studies would be needed.

0666: HAND-SEWN ANASTOMOSIS INCURS HIGHER RISK OF LEAK FOLLOWING REVERSAL OF ILEOSTOMY COMPARED TO STAPLED TECHNIQUE

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Aim: To investigate the anastomotic leak-rate following reversal of ileostomy operations in a single centre.
Methods: A retrospective database of reversal of ileostomy operations between January 2007 and December 2010 was compiled. Technique and materials used in anastomosis construction, patient demographic, and pathological data was collected. Data was analysed to determine the anastomotic leak-rate and factors influencing risk of leak.
Results: 123 operations were identified. 5 anastomotic leaks were identified (leak-rate 4.07%). Hand-sewn (n=4/30, 13.33%) versus stapled technique (n=1/93, 1.08%) significantly incresed risk of leak, p=0.0125. No other factors influenced risk of leak. All leaks required laparotomy, there was no mortality.
Conclusions: A hand-sewn versus stapled anastomosis significantly increases the risk of leak following reversal of ileostomy.

0674: LAPAROSCOPIC TECHNIQUE REDUCES DURATION OF HOSPITAL ADMISSION FOLLOWING ANTERIOR RESECTION

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Aim: To investigate short-term outcomes following laparoscopic versus open anterior resection.
Methods: A retrospective database of anterior resections between January 2007 and December 2010 was compiled. Data for surgical approach, materials and methods used in construction of anastomosis, anastomotic leak, and duration of postoperative admission was collected & analyed.
Results: 173 anterior resections were identified. 10 leaks were identified but no significant factor was identified as influencing risk of leak. Mean duration of hospital stay was significantly lower following laparoscopic (7 days, SD±5.4) and laparoscopic-converted (10 days, SD±6.8) operations compared to open procedure (16 days, SD±25.0), 1-way ANOVA p=<0.0001.
Conclusions: Laparoscopic technique reduces duration of hospital admission following anterior resection compared to open technique.

0726: THE ROLE OF 'NEUTROPHIL-TO-LYMPHOCYTE RATIO' IN PREDICTING OUTCOMES OF PATIENTS WITH LOCALLY ADVANCE RECTAL CANCERS

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Aims: To study the role of pre-treatment 'neutrophil-to-lymphocyte ratio (NLR)' as a new predictive marker in management of patients with locally advance rectal cancer(LARC).
Methods: We undertook a retrospective review of all consecutive patients with LARC who underwent curative treatment at Mount Vernon Cancer Centre between 1998-2008. Patients with incomplete data were excluded. We analysed the role of NLR in predicting (i) clinical staging, (ii) response to neoadjuvant chemoradiotherapy, and (ii) long-term prognosis. Statistical significance is set at p <0.05.
Results: A total of 225 patients (M:F=2:1;Age(mean;range)=64:30-89 years) were included. The NLR increased proportionally with higher clinical T-stage (F (2,200) =9.5, p <0.001) and held predictive value (p 0.001;CI 0.1,0.4). There was significant tumour down-staging (cTNM vs ypTNM; T-stage = Z -6.8,p <0.001, N-stage = Z -6.3,p <0.001), but NLR had no role in predicting response (OR 0.86, p 0.13). For long-term outcomes, NLR is associated with high death rate in univariate analysis (t 2.16, p 0.03) but not in multivariate regression analysis (local recurrence-OR 1.17, p 0.18; distant metastasis – OR 1.14 p 0.12;death rate - OR 0.97, p 0.75).
Conclusion: Pre-treatment NLR may have a role in predicting preclinical staging and high death rate in patients with LARC.

0746: ALTERATION IN ENTEROENDOCRINE CELL POPULATION IN EARLY COLONIC NEOPLASIA

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Aims: Although enteroendocrine cells (EECs) play a critical role in regulating gastrointestinal physiology their role in colorectal carcinogenesis is under-investigated. EECs express receptors for short-chain fatty acids (SCFAs), the bacterial fermentation products of dietary fibre, including butyrate. We investigated the association of EEC expression with faecal SCFA levels in normal and neoplastic colonic epithelium.
Methods: Endoscopic biopsies from normal and adenoma patient groups were taken at the morphologically normal mid-sigmoid and at the adenoma and its contralateral field (where present). Immunohistochemical staining was performed for EEC markers: chromogranin-A (CgA), GLP-1 and somatostatin. Stool samples were collected for SCFA analysis.
Results: CgA expression was observed in a small number of singly dispersed cells, accounting for up to 1.4% of those in normal crypts. In mid-sigmoid sections the CgA+ fraction was significantly higher in low butyrate groups (1.82%) than in high ones (1.11%) (P = 0.037). Within the contralateral field the CgA+ fraction was reduced overall, but association with butyrate levels was lost.
Conclusions: The EEC population is reduced in the vicinity of colonic neoplasia, suggesting a field effect. Numbers also decreased with increasing SCFA concentrations at sites distant to the neoplasm. EECs may therefore play a role in early colorectal carcinogenesis.

0763: HOW EFFECTIVE IS A NOVEL BOWEL MANAGEMENT PROGRAMME, INCLUDING BIOFEEDBACK, FOR THE MEDIUM-TERM MANAGEMENT OF PATIENTS WITH FAECAL INCONTINENCE?

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Introduction: There has long been conflicting evidence on the efficacy of biofeedback when used in faecal incontinence (FI). This study evaluated the effectiveness of biofeedback in patients with FI within a novel bowel management programme.
Methods: Prospective data was collected from 2009 -2012 of 200 consecutive patients who underwent a 3-stage nurse specialist-led bowel management programme. Outcomes were assessed using bowel diaries, Likert scale and Wexner/SF-36 scores with patients being discharged if satisfied with symptom improvement (primary endpoint). All discharged patients received telephone follow-up.
Results: 58 patients met the primary endpoint and were discharged at stage 1, 97% still met the primary endpoint at mean follow-up of 20 months. 65/72 stage 2 patients met the primary endpoint, with improvements in defecations/day [mean baseline: 3.8 (1-20) vs. post-biofeedback: 1.8 (1-6) P<0.001], deferment time (mins) [mean baseline: 5.2 (0.5-60) vs. post-biofeedback: 12.0 (2-60) P<0.002] and incontinent episodes/week [mean baseline: 3.6 (0-35) vs. post-biofeedback: 0.4 (0-7) P<0.001]. There were significant improvements in SF-36, Likert/Wexner scores. 88% of stage 2 patients still met the primary endpoint at mean follow-up of 18 months. 70 patients moved onto stage 3 with 7% requiring surgery.
Conclusion: Biofeedback has a significant role in the medium-term management of FI.

0769: ANTERIOR RESECTION SYNDROME- EFFECTIVE SHORT-TERM MANAGEMENT VIA A NOVEL BOWEL MANAGEMENT PROGRAMME

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